

**Amendments to the Claims**

The following is a listing of allowed claims in the application.

Listing of Claims:

Claim 1. (previously presented) An isolated biopolymer marker consisting of SEQ ID NO:3.

Claim 2. (previously presented) A method for determining in a patient sample, the presence of an isolated biopolymer marker consisting of SEQ ID NO:3 which is linked to insulin resistance comprising:

- (a) obtaining a sample from a patient;
- (b) conducting mass spectrometric analysis on said sample in a manner effective to maximize analysis of peptide fragments contained therein and comparing mass spectrum profiles of said isolated biopolymer marker consisting of SEQ ID NO:3 to mass spectrum profiles of peptides obtained and analyzed from said sample; and
- (c) confirming the presence of said isolated biopolymer marker consisting of SEQ ID NO:3 in said sample displaying a peak profile

at about 1819 daltons in said mass spectrum profile;

wherein the presence of said isolated biopolymer marker consisting of SEQ ID NO:3 is indicative of a link to insulin resistance.

Claim 3. (previously presented) The method of claim 2, wherein the sample is an unfractionated body fluid or a tissue sample.

Claim 4. (previously presented) The method of claim 2, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 5. (previously presented) The method of claim 2, wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Maldi Qq TOF, MS/MS, TOF-TOF, ESI-Q-TOF and ION-TRAP.

Claim 6. (previously presented) The method of claim 2, wherein said patient is a human.

Claim 7. (previously presented) A kit for determining the presence of an isolated biopolymer marker consisting of SEQ ID NO:3 comprising: (a) a peptide consisting of SEQ ID NO:3, and (b) an antibody that binds to said peptide in a sample from a patient.

Claim 8. (previously presented) The kit of claim 7, wherein said antibody is immobilized on a solid support.

Claim 9. (previously presented) The kit of claim 7, wherein said antibody is labeled.